

CATALYTIC COMBUSTOR HAVING HIGH CELL DENSITY

ABSTRACT OF THE DISCLOSURE

A catalytic combustor is formed from a stack of flat and corrugated metal strips. The stack may or may not be wound into a spiral or formed into some other curved structure. Some of the strips are displaced, or offset, relative to other strips, such that some strips do not extend as far as the end faces of the stack. The latter feature increases the effective height of the corrugations, at the end faces, and makes it feasible to weld the strips together. In one embodiment, there are high-amplitude corrugated strips and low-amplitude corrugated strips. The low-amplitude corrugated strips increase the effective cell density, but are displaced from the end faces of the stack so as to permit convenient welding. The resulting combustors therefore have very high cell density, yet can be manufactured economically.